

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for transferring connectionless-oriented data packets between systems connected to each other through shared media, the method comprising the steps of:

- i) periodically transferring a Sender Report (SR) packet from a first Reliable Unicast and Multicast Protocol (RUMP) of a packet transmitting-side system to a second RUMP of a packet receiving system, of data packets an SR (Sender Report) packet, which includes wherein the SR packet comprises information representing connectionless-oriented transmission data packets, and wherein the first RUMP and the second RUMP are disposed on an Open System Interconnection (OSI) layer between a transfer layer and an application layer;
- ii) determining if the one or more of the connectionless-oriented data packets are lost based on the information of the SR packet if a receiving-side of the data packets receives the SR packet from the transmitting-side of the data packets, and transferring a Receiver Report (RR) packet from the second RUMP to the first RUMP transmitting-side of the data packets an RR (Receiver Report) packet, when the second RUMP receives the SR packet, wherein the RR packet comprises which includes information about at least one of one or more received connectionless-oriented data packets and at least one lost connectionless-oriented data packet;
- iii) periodically transferring a NACK (Negative Acknowledgement) (NACK) packet from the second RUMP to the first RUMP, which includes information relating to the received data packet, if when a periodic poll of a receiver window of the packet receiving system determines that one or more lost connectionless-oriented data packets exist after the receiving-side of the data packets periodically polls a receiver window, wherein the NACK packet comprises information relating to the one or more lost connectionless-oriented data packets; and
- iv) transferring a to the receiving-side of the data packets an NACKR (Negative Acknowledgement Reply) (NACKR) packet from the first RUMP to the second RUMP, which includes the lost data packets based on information of the NACK packet, if when the first RUMP transmitting-side of the data packets receives the NACK packet from the second

RUMP, receiving side of the data packets wherein the NACKR packet comprises the one or more lost connectionless-oriented data packets.

2. (Currently Amended) The method as claimed in claim 1, wherein the SR packet includes comprises information of relating to a next sequence number and a number of transferred connectionless-oriented data packets.

3. (Currently Amended) The method as claimed in claim 1, wherein the RR packet includes comprises information relating to a next sequence number, an ACK sequence number, a lowest sequence number of the receiver window which is not received, and a bitmap of received connectionless-oriented data packets.

4. (Currently Amended) The method as claimed in claim 1, wherein the NACK packet includes comprises information such as relating to a lowest sequence number of the one or more lost connectionless-oriented data packets and a bitmask of a next lost connectionless-oriented data packet.

5. (Currently Amended) The method as claimed in claim 1, wherein the NACKR packet includes comprises a lowest sequence number of one of the retransmitted connectionless-oriented data packets and a bitmask of a next retransmission packet.

6. (Currently Amended) An apparatus disposed on a Reliable Unicast and Multicast Protocol (RUMP) layer between a transfer layer and an application layer for transferring connectionless-oriented data packets between systems connected to each other through shared media, the apparatus comprising:

a control unit which that manages transmitting states of clients depending on an activating state of the clients and transfers data to one or more apparatus on the RUMP layer of corresponding clients when fault an error occurs in transmission of the connectionless-oriented data packets occurs;

a transmitting/receiving unit-~~which~~that is connected to the control unit and performs data communication between related clients;

an identification unit-~~which~~that detects the transmitting states of the clients and an identification of the clients based on the data communicated in the transmitting/receiving unit; and

a memory for storing client identification information depending on the activating state of the clients and initial sequence numbers related to connectionless-oriented data packet transmission with respect to each client.

7. (Currently Amended) The apparatus as claimed in claim 6, wherein the control unit transfers a an SR (Sender Report) (SR) packet to an apparatus on the RUMP layer of a packet receiving system, which includes information of a sequence number of a next connectionless-oriented packet to be transmitted and a number of already transferred connectionless-oriented packets, when connectionless-oriented data packets are transmitted and received.

8. (Currently Amended) The apparatus as claimed in claim 6, wherein the control unit transfers a an RR (Receiver Report) (RR) packet to an apparatus on the RUMP layer of a packet transmitting system, which includes information regarding a next sequence number to be received ~~by a transmitting side of the data packets~~, an ACK sequence number, a lowest sequence number of a receiver window which is not received, and a bitmap of received connectionless-oriented data packets, when receiving the connectionless-oriented data packets.

9. (Currently Amended) The apparatus as claimed in claim 6, wherein the control unit periodically polls ~~the~~a receiver window and periodically transfers ~~to the transmitting side of the data packets~~a NACK (Negative Acknowledgement) (NACK) packet to an apparatus on the RUMP layer of a packet transmitting system, which includes information about received connectionless-oriented data packets, if the lost connectionless-oriented data packets exist.

10. (Currently Amended) The apparatus as claimed in claim 9, wherein the NACK packet includes a lowest sequence number of one of the lost connectionless-oriented data packets and a bitmask of a next lost data packet.

11. (Currently Amended) The apparatus as claimed in claim 9, wherein a transmission the apparatus on the RUMP layer of data-packets transmitting system, which receives the NACK packet from a receiving side of the data packets, transfers to the receiving side of the data packets an NACKR packet to the apparatus, which includes the lost connectionless-oriented data packet depending on information of the NACK packet.

12. (Currently Amended) The apparatus as claimed in claim 11, wherein the NACKR packet includes a lowest sequence number of one of retransmitted connectionless-oriented data packets and a bitmask of a next retransmission data packet.